

Solve the following:

1.  $12x + 15 - 11x = -25$
2.  $-2 + y + 5 = 3y + 9$
3.  $13y + 9 - 2y = 6y - 8$
4.  $5x - (8x + 3) = 2$
5.  $-2(5y - 1) + 4y = -4$
6.  $4(x - 2) = -2(x + 6) + 31$
7.  $(9y^2 + 8y - 2) - (9y^2 + 5) = 9$
8.  $-\frac{5}{8}x = 15$
9.  $3x + \frac{2}{5} = \frac{1}{2}$
10.  $\frac{x}{9} = 4 + 6 \div 2$
11.  $\frac{x}{7} + x = 8$
12.  $\frac{1}{9} + \frac{x}{6} = \frac{2}{3}$
13.  $\frac{x}{2} - 7 = \frac{x}{9}$
14.  $\frac{x}{3} + \frac{x}{2} = 5$

15. If  $\angle A$  measures  $87^\circ$ ; find the supplement of  $\angle A$ .

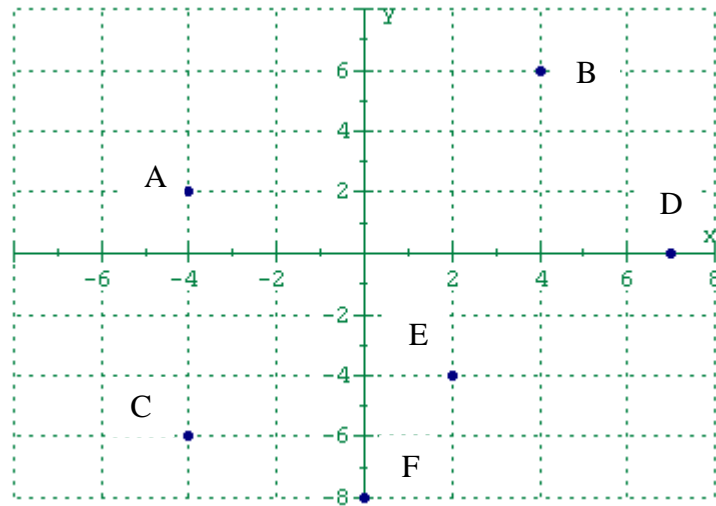
If  $\angle B$  measures  $28^\circ$ ; find the complement of  $\angle B$ .

16. For triangle  $\triangle ABC$ ,  $m\angle A = 23^\circ$  &  $m\angle B = 36^\circ$ . Find the measure of  $\angle C$ . {The sum of all three angles of a triangle is 180 }

17. Plot and label the ordered pairs on the rectangular coordinate plane.

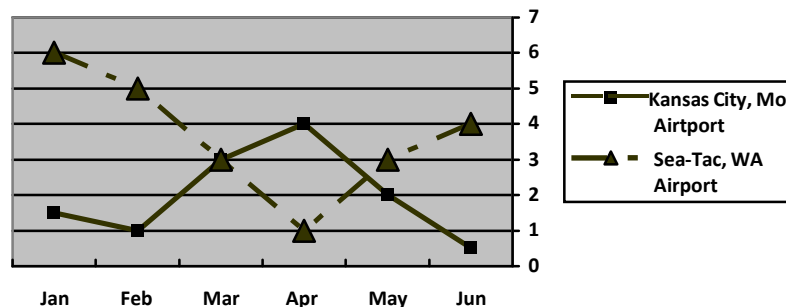
$(-3, 7), (-2, -3), (0, 4), (5, -1), (-6, 0)$

18. State the coordinates of each point on the graph.



19. The comparison line graph below indicates the average monthly precipitation (in inches) at two city airports for the thirty years between 1917 and 2000. Refer to the line graph below to answer the questions.

- During which month was the average precipitation highest at the Sea-Tac airport?
- During which month was the average precipitation at the Sea-Tac airport less than the average precipitation at the Kansas City airport?
- What was the average precipitation for May at the Kansas City airport?
- What month was the average precipitation the same at both airports?



20. Find the mean, median and mode for each set of numbers:

- 11, 32, 21, 74, 32, 25, 29
- 10, 18, 17, 15

## Answers to Math 302 Practice Test 4

1.  $x = -40$

2.  $y = -3$

3.  $y = -\frac{17}{5}$  or  $-3\frac{2}{5}$

4.  $y = -\frac{5}{3}$  or  $-1\frac{2}{3}$

5.  $y = 1$

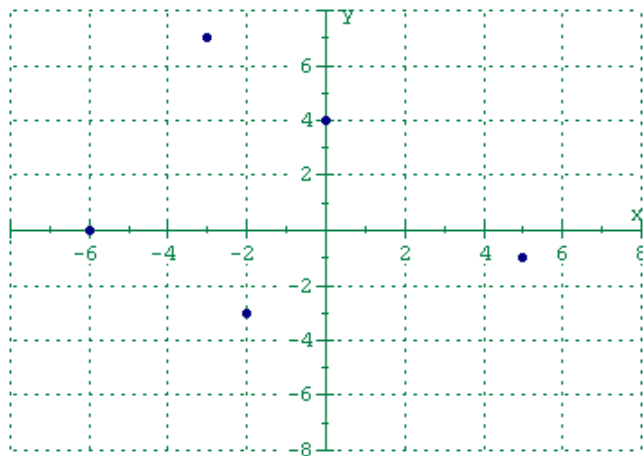
6.  $x = \frac{9}{2}$  or  $4\frac{1}{2}$

7.  $y = 2$

8.  $x = -24$

9.  $x = \frac{1}{30}$

17.



18. A(-4,2); B(4,6); C(-4,-6); D(7,0); E(2,-4); F(0,-8)

19. a. Jan      b. April      c. 2 inches      d. March

20. a. mean – 32; median – 29; mode – 32      b. mean – 15; median – 16; mode - none